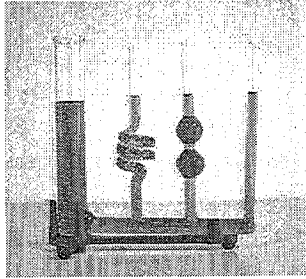


Name: _____ Date: _____ Hour: _____

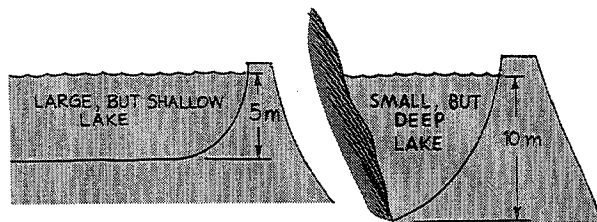
Archimedes' Principle, Pascal's Principle, and Fluid Pressure Notes

Assuming the vases below are filled to the same level, which vase experiences the greatest pressure?

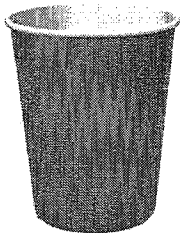
Fluid pressure depends upon what?



Why are dams built thicker at the bottom? Which dam experiences a greater pressure? How do you know?



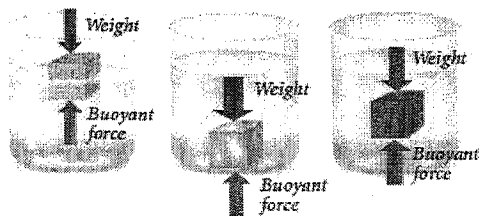
Assume the cup below has water in it and three holes are poked at different levels in the side. How will the water stream out differently from each hole? Why does this happen?



In the image below, what direction is the buoyant force? So buoyancy is _____.

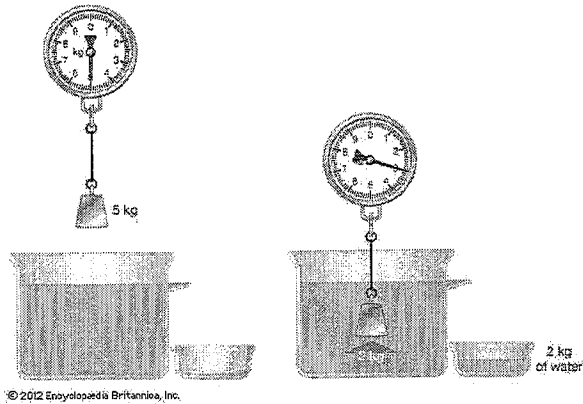
Objects with greater buoyant force than gravity _____. Objects with a smaller buoyant force than gravity _____.

Buoyancy

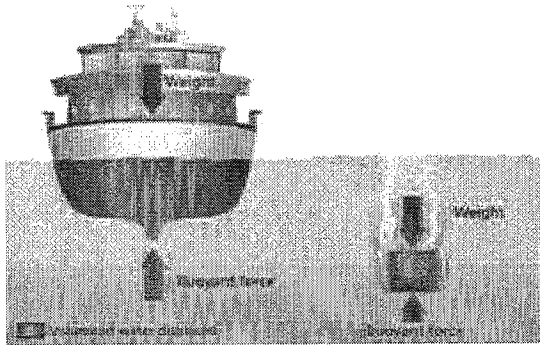


In your own words, what is Archimedes' Principle? This means objects in water feel (lighter, heavier, or the same) as they do out of water?

Archimedes' principle



How can objects that are extremely dense still float in water?



What do you notice about the hydraulic system below? Pascal's Principle states that when there is an increase in fluid pressure at any point in a confined fluid, there is an equal increase at every other point in the container. How is this beneficial for people? Can you think of real life examples of Pascal's Principle at work? What would be the tradeoff between the two pistons shown?

